

ABSTRACT

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THE TOXICOLOGY OF POLYCHLORINATED BIPHENYLS

This diploma thesis is dealing with the toxicology of polychlorinated biphenyls. There are described their properties, sources, their movement in the environment, toxicokinetics and effects on various organ systems.

Together with polychlorinated dibenzofurans and polychlorinated dibenzo-*p*-oxins belong to persistent organic pollutants that can be characterized by their toxicity and ability to accumulate in the environment.

They are synthetic organic aromatic compounds. First time, they were synthesized in 19th century and since 30s of the 20th century have been industrially produced in huge amounts. They have a number of useful physical and chemical properties that allow their wide use and many of these products, which contain PCBs, are still used.

In the U.S., their production was already banned in the 70s of 20th century, with us they were produced until 1984. In 2001 was signed the Stockholm convention, that obligates the involved countries to limit the production, use and discharge of these substance into the environment.